

IN THE SPECIFICATION:

The paragraph beginning at page 8, line 7 has been amended as follows:

To this end the signal processor 30 can be conveniently configured as a known recursive digital filter 31, having a filter constant K selected to achieve the desired temporal response for the output signal and in the present example operates according to an algorithm of the form:

REPEAT:

$$V_t = \frac{V_{old} * (K - 1) + V_g}{K}$$

$$V_{old} = V_t$$

UNTIL $t = t_1$

where V_g is the "unfiltered" velocity measured by the acoustic velocity meter 18 at the fixed and known sampling rate. The signal processor 30 is, in the present embodiment, configured to receive the output from the meter 18 which indicates that a perturbation in the temperature of the gas has occurred and which is employed in the processor 30 to initiate (time t_0) the filtering of the velocity signal according to the algorithm above.